

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007974**Date Inspected:** 07-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** LV LI QING**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG COMPONENT**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance(QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

In process Inspection

BAY#14

This QA Inspector observed the following work in progress:

Submerged Arc Welding (SAW) in the 1G position of the OBG Deck panel Splice, weld No. SEG-048-006. The welder is identified as #045265. The welding variables recorded by QC appear to comply with WPS- B – T – 2221-B-L2C-S-2.

Submerged Arc Welding (SAW) in the 1G position of the OBG Deck panel Splice, weld No. SEG-037-010. The welder is identified as #058100. The welding variables recorded by QC appear to comply with WPS- B – T – 2221-B-L2C-S-2.

Visual Inspection

Out Side Trial Assembly Area

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

This QA Inspector observed the following fabrication issues

For Segment 4AE the weld joints between RS6C(FS) and X37A(FS) this Quality Assurance Inspector (QA) observed the ZPMC welder(054013) was carrying out repair welding without any WPS & WRR and no CWI was available for that mention welding job. The QA inspector found that the joint was fillet welds on both side of the stiffener as per approved drawing. Now ZPMC made groove weld joint with Air carbon Arc gouging prior to Caltrans QA Inspector verification . The QA Inspector found the root gap of approximately 15mm.

The QA Inspector observed the MT repair weld joint identified as SSD16A-PP26-003 & SSD18A-PP28-005 for segment 4BE the ZPMC welder gouged the repair area more then 10 mm deep. For this repair job WRR is require at job side.

During random Inspection the QA inspector found approximately 13 open porosity dia. 2-3mm and lack of side wall fusion on the segment 4AE&4BE. The condition were observed on the "T" stiffeners to plate(Bottom & Side Panels)at field splice edges area (3BE-4AE&4BE-5AE).

This QA Inspector generated an incident report for this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Bera,Subhasis	Quality Assurance Inspector
<b>Reviewed By:</b>	Prue,Erik	QA Reviewer

---